Technical data sheet and product guideline

GFHAMILTON

Hamilton yellow gold flash solution for bath plating 0.6 g/l (ready-to-use)

BATH

Color coordinates

L	
a	
b	
c	

Product form

Metal concentration	**0,6 g/l (Au)**
Form	**Liquid**
Material color	**Transparent**
Storage time	**2 years**
Volume	**1 liter**

Operating data

	Range	Optimal
Voltage (V)	**3 - 6**	**4,5**
Working temperature (°C)	**60**	**60**
Exposure time (sec)	**10-60**	**35**
pH	**9-11**	**10**
Cathode efficiency (mg/Amin)	**8-12**	**10**
Anode/cathode ratio	**>1:1**	**>1:1**
Anode type	**Titanium platonized or stainless steel**	
Agitation	**Absent**	

Metal concentration

Metal	Range (g/l)	Optimal (g/l)
Gold	**0.6 - 0.3**	**0.6**

Deposit data

Purity (%)	**99.9**
Hardness (HV 0,01)	**90-100**
Density (g/cm3)	**19**
Thickness (um)	**0,1-0,2**
Appearance	**Shiny**
Color	**Hamilton Yellow**

LEGOR GROUP S.p.A. - Via del Lavoro,1 - 36050 Bressanvido (VI) Italy - tel. +39 0444 467911 - fax +39 0444 660677- info@legor.com - www.legorgroup.com

Technical data sheet and product guideline

GFHAMILTON

Hamilton yellow gold flash solution for bath plating 0.6 g/l (ready-to-use)

BATH

Preparation

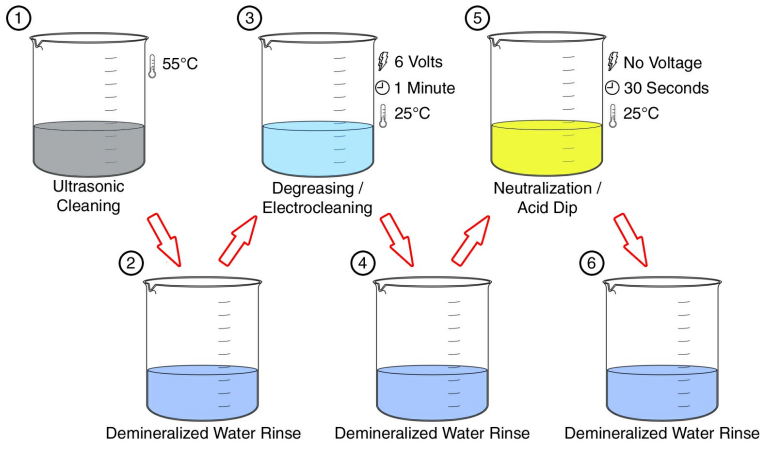
GFHAMILTON is a ready-to-use plating bath at the concentration of 0.6 g/l of gold. No preparation is required while filling the working tank.

Equipment

Working vessel materials: Pyrex glass / PVC / polypropylene
Power supply: DC current rectifier with low residual AC (<5%)
Heating element
Anode type: Platinized titanium [1.5-2.5 µm] or stainless steel
For larger bath volumes:

Magnetic driven filter pumps with 5-15 µm cartridge (before use, boil and wash the cartridges with demineralized water for 3 hours to prevent organic contamination)
Amp/min counter

Pre treatment



LEGOR GROUP S.p.A. - Via del Lavoro,1 - 36050 Bressanvido (VI) Italy - tel. +39 0444 467911 - fax +39 0444 660677- info@legor.com - www.legorgroup.com

Technical data sheet and product guideline

GFHAMILTON

Hamilton yellow gold flash solution for bath plating 0.6 g/l (ready-to-use)

BATH

Bath maintenance

This process is easy to maintain, but will initially requires frequent analytical controls in order to obtain a correct concentration level of all the metals present. Metal concentrations greatly influence the final deposited color; therefore, an incorrect management of these parameters shall inevitably lead to unwanted colors. Some general guidelines for maintenance are below described:

- Adding GF1AGR will lead the colour towards green-/pale hues.
- Adding GF1CUR will lead the colour towards red/pink hues.
- Adding GF10AUR will lead the colour towards yellow hues.
- Adding AUS683 is used to replenish the gold content
- Potassium cyanide concentration must be frequently controlled to be maintained at the correct working concentration

Post treatment

Electrolyte should be removed from the surface as quick as possible. Rinse off the bath rests in a recovery rinse (still rinse). Rinse the parts in circulating deionized water and dry.

Water purity

To prevent contamination of the bath both during its preparation and any subsequent replenishing operations, use demineralized water with a conductivity of less than 3 µS/cm (containing no traces of organic compounds, Chlorine, Silicon, or Boron).

Safety information

Being an alkaline solution, the electrolyte is an irritant to the skin, eyes and mucous membranes. Caution should be exercised when using the product, avoiding contact with the eyes and skin. Use gloves and safety goggles. Keep away from acid based chemicals. For further information please refer to the relative MSDS.

Additional hints

For maximum performance and in particular in terms of resulting color do not use an excessive agitation. A moderate agitation of the pieces to be plated will be sufficient. For larger volumes it is sufficient the use of a magnetic drive filter pump with a not too much high capacity.

LEGOR GROUP S.p.A. - Via del Lavoro,1 - 36050 Bressanvido (VI) Italy - tel. +39 0444 467911 - fax +39 0444 660677- info@legor.com - www.legorgroup.com

Technical data sheet and product guideline

GFHAMILTON

Hamilton yellow gold flash solution for bath plating 0.6 g/l (ready-to-use)

BATH

Related products		Packaging
AUS683	Gold replenisher in salt form	

Your jewelry technology provider LEGOR GROUP
LEGOR GROUP S.p.A. - Via del Lavoro,1 - 36050 Bressanvido (VI) Italy - tel. +39 0444 467911 - fax +39 0444 660677- info@legor.com - www.legorgroup.com